

## **IN THE CLAIMS:**

Please cancel claims 4-6, 17-19 and 21, without prejudice, and amend claims 1-3, 7-11, 14-16 and 20, and 22-28 as follows.

1. (Currently Amended) A method for managing radio resources in a radio system, the radio resources being used for providing a radio connection between user equipment and a radio cell of a base station in a radio network of the radio system, the method comprising:

receiving (402) radio capacity information on the radio cell,

receiving (404) transport capacity information on a transport network, the transport network being used for connecting the base stations of the radio network to a core network, comprising:

~~characterized by~~

determining (406) a transport capacity limit for the radio cell based on the transport capacity information;

signalling (408) the transport capacity limit of the radio cell to the base station;

adjusting (410), in the base station, the radio capacity information based on the transport capacity limit;

signalling (412) from the base station the adjusted radio capacity information on the radio cell;

managing (414) radio resources of the radio network by using the signalled adjusted radio capacity information on the radio cell.

2. (Currently Amended) The method of claim 1, ~~wherein available~~ further comprising adjusting the available radio capacity of the radio cell ~~is adjusted~~ based on the received transport capacity limit.

3. (Currently Amended) The method of claim 1, wherein the radio capacity information indicates at least one element selected from a group comprising: the current cell load and the maximum radio capacity of the radio cell, the current cell load and the available radio capacity of the radio cell, the transport load of the transport network, the transport load of a connection from one base station of the radio network to another base station of the radio network.

4. (Cancelled)

5. (Cancelled)

6. (Cancelled)

7. (Currently Amended) The method of claim 1, further comprising signalling ~~wherein the adjusted radio capacity information on the radio cell is signalled~~ from the base station to a radio resource management unit to be used in managing radio resources.

8. (Currently Amended) The method of claim 1, further comprising signalling ~~wherein the adjusted radio capacity information on the radio cell is signalled~~ from the base station to a Common Radio Resource Management Server to be used in managing radio resources.

9. (Currently Amended) The method of claim 1, further comprising determining ~~wherein the transport capacity limit of a radio cell is determined~~ in a transport resource management unit.

10. (Currently Amended) The method of claim 1, further comprising determining ~~wherein the transport capacity limit of a radio cell is determined~~ in an Internet Protocol Transport Resource Manager.

11. (Currently Amended) The method of claim 1, further comprising organizing a handover list ~~wherein a handover list is organized~~ based on the adjusted radio capacity information on the radio cell.

12. (Original) The method of claim 1, wherein the adjusted radio capacity information on the radio cell is used when handling base station admission requests.

13. (Original) The method of claim 1, wherein the adjusted radio capacity information on the radio cell is used when handling handover requests.

14. (Currently Amended) A radio system, comprising:  
at least one radio network ~~(324)~~, the radio network (324) comprising at least one base station ~~(326)~~ for providing user equipment (370) with a radio cell ~~(124, 125, 128, 129)~~ for radio transmission and reception;

a transport network (322) for providing the base stations of the radio network with a connection to a core network ~~(100)~~ of the radio system;

a radio resource management unit ~~(301)~~ for managing the radio resources between the base stations ~~(326, 328)~~ and the user equipment (370) in the radio network (324), configured to receive radio capacity information on the radio cell ~~(124, 125, 128, 129)~~;

a transport resource management unit (300) for managing the transport network resources, configured to receive transport capacity information on the transport network ~~(322)~~;

~~characterized in that~~ wherein

the transport resource management unit (300) is configured to determine a transport capacity limit for a radio cell based on the transport capacity information;

wherein the transport resource management unit (300) is configured to signal the transport capacity limit of the radio cell to the base station (326);

wherein the base station (326) is configured to adjust the radio capacity information on the radio cell based on the transport capacity limit;

wherein the base station (326) is configured to signal the adjusted radio capacity information on the radio cell to the radio resource management unit (301) to be used in managing radio resources[[,]]; and

wherein the radio resource management unit (301) is configured to manage radio resources of the radio network (324) by using the signalled adjusted radio capacity information on the radio cell.

15. (Currently Amended) The system of claim 14, wherein the available radio capacity of the radio cell is adjusted based on the received transport capacity limit.

16. (Currently Amended) The system of claim 14, wherein the radio capacity information indicates at least one element selected from a group comprising: the current cell load and the maximum radio capacity of the radio cell (124, 125, 128, 129), the current cell load and the available radio capacity of the radio cell, the transport load of the transport network, the transport load of a connection from one base station of the radio network to another base station of the radio network.

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Currently Amended) The system of claim 14, wherein the base station is configured to signal the adjusted radio capacity information on the radio cell ~~is signalled from the base station (326)~~ to a Common Radio Resource Management Server (301) to be used in managing radio resources.

21. (Cancelled)

22. (Currently Amended) The system of claim 14, wherein a handover list is organized based on the adjusted radio capacity information on the radio cell ~~(124, 125, 128, 129)~~.

23. (Currently Amended) The system of claim 14, wherein the adjusted radio capacity information on the radio cell ~~(124, 125, 128, 129)~~ is used when handling base station admission requests.

24. (Currently Amended) The system of claim 14, wherein the adjusted radio capacity information on the radio cell ~~(124, 125, 128, 129)~~ is used when handling handover requests.

25. (Currently Amended) The system of claim 14, wherein the base station ~~(326)~~ is configured to adjust the available radio capacity of the radio cell based on the transport capacity limit.

26. (Currently Amended) The system of claim 14, wherein the transport resource management unit ~~(300)~~ is an Internet Protocol Transport Resource Manager.

27. (Currently Amended) The system of claim 14, wherein the radio resource management unit (~~301~~) is a Common Radio Resources Management Server.

28. (Currently Amended) The system of claim 14, wherein the radio resource management unit (~~301~~) is configured to organize a handover list based on the adjusted radio capacity information on the radio cell.

Please add new claims 29-34 as follows:

29. (New) A transport resource management unit for managing the transport network resources and for receiving transport capacity information on the transport network in a radio system, which comprises at least one base station for providing user equipment with a radio cell for radio transmission and reception and a radio resource management unit for managing the radio resources between the base station and the user equipment and configured to receive radio capacity information on the radio cell, wherein the transport resource management unit is configured to determine a transport capacity limit for a radio cell based on the transport capacity information and to signal the transport capacity limit to the base station for the adjustment of the radio capacity information based on the transport capacity limit and for signalling the adjusted radio capacity information to the radio resource management unit for managing radio resources of the radio network by using the signalled adjusted radio capacity information.

30. (New) A radio resource management unit for managing radio resources between base stations and user equipment in a radio network of a radio system, the radio resource management unit being configured to receive radio capacity information on the

radio cell, wherein the radio resource management unit is configured to manage radio resources of the radio network by using signalled adjusted radio capacity information on the radio cell, the signalled adjusted radio capacity information being signalled from a base station and being adjusted based on a transport capacity limit determined based on the transport capacity information on the transport network of the radio system.

31. (New) A base station of a radio system for providing user equipment with a radio cell for radio transmission and reception in a radio system which comprises a transport network for providing the base station with a connection to a core network of the radio system, a radio resource management unit for managing the radio resources between the base station and the user equipment, a radio resource management unit configured to receive radio capacity information on the radio cell, the radio system further comprising a transport resource management unit for managing the transport network resources and configured to receive transport capacity information on the transport network, wherein the base station is configured to adjust the radio capacity information on the radio cell based on the transport capacity limit determined based on the transport capacity information and signalled from the transport resource management unit; and

wherein the base station is configured to signal the adjusted radio capacity information on the radio cell to the radio resource management unit for managing the radio resources by using the adjusted radio capacity information.

32. (New) The base station of claim 31, wherein the base station comprises the radio resource management unit.

33. (New) The base station of claim 31, wherein the base station comprises the transport resource management unit.

34. (New) A base station for providing user equipment with a radio cell for radio transmission and reception, comprising:

a radio resource management unit for managing the radio resources between the base station and the user equipment in the radio network, the radio resource management unit being configured to receive radio capacity information on the radio cell;

a transport resource management unit for managing transport network resources, configured to receive transport capacity information on the transport network,

wherein the transport resource management unit is configured to determine a transport capacity limit for a radio cell based on the transport capacity information;

wherein the transport resource management unit is configured to signal the transport capacity limit of the radio cell to the base station;

wherein the base station is configured to adjust the radio capacity information on the radio cell based on the transport capacity limit;

wherein the base station is configured to signal the adjusted radio capacity information on the radio cell to the radio resource management unit to be used in managing radio resources; and

wherein the radio resource management unit is configured to manage radio resources of the radio network by using the signalled adjusted radio capacity information on the radio cell